REMARKS

Claims 10 to 12, 16 to 21 and 25 to 34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Applicants' Admitted Prior Art (AAPA) in view of Miller et al. (US 6,584,671) and Shtikan et al. (US 7,192,624). Claims 15 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Miller et al., Shtikan et al. and Warichet et al. (US 6,921,439).

Reconsideration of the application based on the following is respectfully requested.

Rejections under 35 U.S.C. §103(a)

Claims 10 to 12, 16 to 21 and 25 to 34 were rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Miller et al. and Shtikan et al.

AAPA is disclosed in the specification at [0001] to [0004].

Miller et al. discloses "a known method" for manufacturing stator packets. Strips made of silicated magnetic steel sheets are provided with adhesive layers and sheet blanks are stamped out from the strips. The sheet blanks are combined into stacks and thereafter, by heating and simultaneous pressure, are connected together to form a sheet stack. "Then the finished sheet stacks are additionally provided with a coating of an epoxy resin or the like, in order to provide the cut edges of the plates revealed during stamping with an additional anti-corrosion layer." (Col. 1, lines 16 to 31).

Shtikan et al. discloses a continuously operating furnace and method for obtaining a thermal diffusion coating on the outside surface of metallic articles. (See Abstract). In describing thermal diffusion coating processes, Shtikan et al. states that "[u]sually thermal diffusion coating process utilizes zinc diffusion to apply zinc coating on components made of ferrous materials like iron, low-carbon steels, medium carbon and alloy steels, high carbon steels and cast irons ... The components are embedded in finely divided zinc powder and heated to a temperature, corresponding to the point at which zinc melts, usually at 350 to 450 degrees C. Since the component to be coated is covered by zinc powder to provide close intimate contact therewith,

heating up to this temperature is accompanied by diffusion of zinc atoms into the bulk of the object and formation of external coating layer. This layer consists either of pure zinc or of its alloys with the atoms of the host component. The coating is corrosion-resistant; it has good appearance and makes a good paint base. Due to the small dimensional changes involved in this process it is of particular value for the treatment of small parts, e.g., bolts, nuts, bushings, and small hardware articles such as hose clamps and electrical components, etc." (Col. 1, lines 19 to 30).

Claim 10 recites "[a] process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, the process comprising:

forming a component blank from the steel semi-finished product using a cold-forming process, the component blank including a margin contour corresponding approximately to a contour of the press-hardened component and a margin edge;

trimming the component blank at the margin edge to the margin contour;

heating and press-hardening the trimmed component blank using a hot-forming tool; and

covering the press-hardened component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process."

Claim 20 recites "[a] process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, the process comprising:

heating and press-hardening the semi-finished steel product using a hot-forming tool so as to form a press-hardened component blank, having a margin contour corresponding approximately to the press-hardened component and a margin edge;

trimming the press-hardened component blank at the margin edge to the margin contour;

covering the press-hardened, trimmed component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process."

None of the cited references discloses the step of "covering the press-hardened, trimmed component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process" as recited in claims 10 and 20. AAPA discloses that a strip coating to prevent corrosion is customarily applied before pre-forming, which is before "the heating and press-hardening" and "trimming" of claims 10 and 20, and therefore does not disclose

the "covering the press-hardened, trimmed component blank with a corrosion-prevention layer" required by claims 10 and 20. (Paragraph [0004]). Miller et al. discloses coating sheet blanks with "a coating of expoxy resin or the like" after the sheet blanks are stamped out of strips made of silicated magnetic steel sheets and combined into sheet stacks "by heating and simulatenous pressure." (Col. 1, lines 16 to 31). The sheet blanks combined into sheet stacks in Miller et al. are stamped out of strips, but are not "trimmed" as required by claims 10 and 20; thus, Miller et al. does not cure the deficiency of AAPA with respect to the "covering" step of claims 10 and 20. Furthermore, Shtikan describes a method for obtaining a thermal diffusion coating and discloses that a thermal diffusion coating process usually involves forming a corrosion-resistant coating of zinc on the surface of iron or steel components, but does not disclose that the iron or steel componets are "press-hardened, trimmed component blanks" as required by claims 10 and 20. (Col., lines 19 to 21). Thus, none of the references discloses the step of "covering the press-hardened, trimmed component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process" of claims 10 and 20.

It is also respectfully submitted that it would not have been obvious to one of skill in the art to have combined AAPA, Miller et al. and Shtikan to meet these limitations of claims 10 and 20. It is respectfully submitted that it would not have been obvious to one of skill in the art to have applied the coating of an epoxy resin of Miller et al. to a press-hardened and trimmed component blank of AAPA. Neither AAPA nor Miller et al. discloses any reason to apply the coating of an epoxy resin to a single press-hardened and trimmed component blank. Miller et al. only discloses coating stacks of sheet blanks that were never trimmed with a coating of epoxy resin and does not indicate that such a coating should be applied after "trimming" and "press-hardening" as claimed.

Moreover, it is respectfully submitted that one of skill in the art would not have applied the Shtikan thermal diffusion process to coat press-hardened, trimmed component blanks discussed in AAPA, or be used with the epoxy resin coatings of Miller et al., or to any combination of the two. Shtikan operates at temperatures above those suitable for press-hardened trimmed blanks and the epoxy resin coating of Miller et al, and it is respectfully submitted that one of skill in the art would not have combined these references. In addition, the Miller et al. disclosure teaches away from such thermal diffusion, as heating in Miller et al. occurs prior to any epoxy resin is added under normal temperatures. (Col .1, lines 25 to 31).

Withdrawal of the rejections under 35 U.S.C. §103(a) to claim 10, along with claims 11, 12, 16 to 19 and 30 to 32 depending therefrom, and claim 20, along with claims 21 to 29, 33 and 34 depending therefrom, is respectfully requested.

Claims 15 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Miller et al., Shtikan et al. and Warichet et al. (US 6,921,439).

Warichet et al. does not cure the deficiencies of AAPA, Miller et al. and Shtikan et al. discussed above with respect to claim 10, upon which claim 15 depends, and claim 24, upon which claim 20 depends. Thus, in view of the arguments above with respect why claims 10 and 20 are not unpatentable over AAPA in view of Miller et al. and Shtikan et al., withdrawal of the rejection under 35 U.S.C. 103(a) of claims 15 and 24 is respectfully requested.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,

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